



B.E DEGREE END SEMESTER EXAMINATIONS, APRIL/MAY 2011

INDUSTRIAL ENGINEERING

FOURTH SEMESTER -REGULATION 2004

IE282 WORK DESIGN

Time:3 hr

Max.Mark:100

Answer ALL Questions

PART –A (10 x 2 =20 Marks)

1. What do you mean by total productivity index?
2. Define Basic work content.
3. Give any four symbols used in Gilbreth process chart
4. Mention two important purposes of micro motion study
5. What is the difference between the terms representative worker and qualified worker in time study practice?
6. What do you mean by standard rating?
7. Define Pre determined time system.
8. List out the various aspects of job performance.
9. How are organization and methods different from work study?
10. What are the two types of business forms?

PART –B(5 x 16 =80 Marks)

11. (i) Briefly discuss about the components of productivity measurement system. 8
(ii) Briefly explain about two important pre requisites for the successful application of the work study 8
12. a With a neat diagram explain about the eight stages in the application of method study 16

Or

b(i) Discuss about commonly used approaches for developing a preferred work method 8
(ii) Briefly explain about principles of motion economy 8
13. a(i) Explain about the procedure involved in Time study 8
(ii) What is the purpose of synthesis work measurement technique? Explain the steps involved in synthesis technique. 8

Or

- b(i) Briefly discuss about the necessity of breaking down operation into elements and rules concerning in breaking down. 8
- (ii) Explain about the various allowances added to arrive standard time 8
- 14.a(i) Discuss about advantages, drawbacks and applications of Pre determined time system. 8
- (ii) Discuss about essential requirements of sound wage incentive plan 8
- Or**
- b(i) Discuss about advantages, drawbacks of work sampling. 8
- (ii) Write down the merits and demerits of standard piece rate system 8
- 15.a(i) Briefly discuss about the steps involved in organization and methods. 8
- (ii) Discuss the application of Group capacity assessment(GCA) for assessing the performance of group of workers. 8
- Or**
- b(i) Explain the need for organization and methods. 8
- (ii) Briefly explain about the principles of forms design 8